



# Isaac Cheung

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## EDUCATION

**UNIVERSITY OF  
BRITISH COLUMBIA**  
BSc IN COMPUTER SCIENCE  
3RD YEAR STANDING  
Vancouver, BC  
September 2018 - April 2022

GPA: 3.83 / 4.33  
Major GPA: 4.00 / 4.33

## LINKS

GitHub:// [github.com/cheungis](https://github.com/cheungis)  
LinkedIn:// [linkedin.com/in/cheungis](https://linkedin.com/in/cheungis)  
Website:// [cheungis.github.io](https://cheungis.github.io)

## SKILLS

### LANGUAGES

Python • Java • C • C++ • C# • Matlab  
TypeScript • JavaScript • HTML •  $\text{\LaTeX}$   
Haskell • Prolog • SQL Server

### VERSION CONTROL SYSTEMS

Git • GitHub

### TESTING

JUnit

### OTHER TECHNICAL SKILLS

React • Node.js • Three.js • Swing  
Pygame • CSS • Android Studio

## COURSEWORK

### COMPUTER SCIENCE

Algorithm Design and Analysis  
Computer Graphics  
Functional and Logic Programming  
Data Structures and Algorithms  
Computer Systems  
Software Construction  
Formal Systems and Logic  
Foundations of Computing

### MATHEMATICS & STATISTICS

Probability  
Linear Algebra  
Calculus I, II, III  
Applied Statistics

## EXPERIENCE

### BGC ENGINEERING | WEB & MOBILE DEVELOPMENT INTERN

Jan 2020 – May 2020 | Vancouver, BC Canada

- Worked on Cambio, BGC Engineering's geohazard risk management software.
- Added functionality on map identify tool, enabling the tool to select polygon geometry based target objects.
- Designed and built 2 new helper services which solves and manages certain concurrency issues related to the web form logic.
- Created new React web forms and web form components to support engineers in the field, allowing them to electronically document inspections and remotely sync the data on various hazard sites.
- Fixed numerous bugs in both front and back end of the code base in TypeScript, C#, and SQL Server, decreasing the Jira backlog by over 10%.

## PROJECTS

### SOUNDBOARD | JULY 2019

- Built a soundboard app using Android studio.
- Employs event listeners implemented with the observer design pattern.
- Created a desktop version using Java Swing.

### DISCORD BOTS | JANUARY 2019

- Developed 2 Discord bots in JavaScript with Discord JS, a node.js module.
- Designed with best practices in mind, such as dynamic command handling.
- Bot #1 generates links to allow for ease of access to websites.
- Bot #2 automates the process of mass deleting server messages.
- Bot #2 allows for the option of searching and filtering messages to include or exclude attributes, such as the message author.

### LEAGUE OF LEGENDS PROFILE ANALYZER | SEPTEMBER 2018

- Extracts data from players and store them in profiles to analyze and compare, built with Object Oriented Programming in Java.
- Incorporated design patterns to solve problems encountered during development including the iterator and observer design patterns.
- Unit testing was done with JUnit to ensure the correctness of code.
- GUI built with Java Swing.

### CLASSIC GAMES | OCTOBER 2017

- Recreated classic games using Object Oriented Programming in Python.
- Games include pong, tic tac toe and a memory game.
- Designed with OOP and OOD paradigms, simplifying modification and expansion of content for the games that were recreated.
- GUI Designed and implemented through the pygame library.